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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,556	03/31/2004	James L. Tarpo	1775	4975

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EXAMINER

RAYMOND, EDWARD

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/815,556	Applicant(s) TARPO ET AL.	
	Examiner Edward Raymond	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-36 is/are rejected.
 7) ☒ Claim(s) 37-44 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20051229</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-11, 14-31, 35, and 36** are rejected under 35 U.S.C. 102(b) as being anticipated by Cline et al.

Cline et al. teach a method for testing a spa system which includes a spa tub for holding water (Claims 1, 25, and 36: see Figure 1: Spa 2), an electronic controller system which controls the spa system functions (Claims 1, 25, and 36: see Controller System 100), a plurality of controlled devices controlled by the controller system including a pump for recirculating water in the tub (Claims 1, 25, and 36: see Figure 6: Spa Jet Pump 86), and a heater for heating water (Claims 1, 25, and 36: see Figure 6: Heater 78), the method comprising: exercising the plurality of controlled devices during a testing regime (Claims 1, 25, and 36: see col. 12, lines 43-62); monitoring an electrical current drawn by the spa system (Claims 1, 25, and 36: see col. 10, lines 1-5); determining whether the electrical current drawn by the spa system during the testing regime is consistent with an expected current profile (Claims 1, 25, 35 and 36: see col. 10, lines 1-5).

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Cline et al. teach a method further comprising: filling the spa tub with water before exercising the plurality of controlled devices (Claims 2 and 17: see Figure 14C and col. 15, lines 18-45).

Cline et al. teach a method wherein the exercising the plurality of controlled devices comprises: conducting a pump cycle comprising turning the pump on, running the pump for a time, and turning the pump off (Claims 3, 18 and 26: see col. 12, 48-62).

Cline et al. teach a method wherein the exercising the plurality of controlled devices comprises: turning the heater on, and subsequently turning the heater off (Claims 4, 19 and 27: see col. 12, lines 55-59).

Cline et al. teach a method wherein the exercising the plurality of controlled turning a blower fan on, and subsequently turning the fan off (Claims 5, 20 and 28: see Figure 6: Spa Blower 92).

Cline et al. teach a method wherein the exercising the plurality of controlled devices further comprises turning a spa light on, and subsequently turning the spa light off (Claims 6, 21 and 29: see Figure 6: Aux Lights 94).

Cline et al. teach a method wherein the exercising the plurality of controlled devices comprises: sending a command or set of commands from a test station to the electronic controller of the spa system to turn on and turn off one or more of the controlled devices (Claims 7 and 22: see Figure 6).

Cline et al. teach a method wherein the exercising the plurality of controlled devices comprises: operating each of the plurality of controlled devices one at a time to

isolate the current drawn by each controlled device (Claims 8, 23 and 30: see col. 4, lines 40-64).

Cline et al. teach a method wherein the exercising the plurality of controlled devices comprises operating all of the controlled devices simultaneously to measure a maximum current load of the spa (Claims 9, 24 and 31: see col. 10, lines 1-5 and col. 10, lines 52-65).

Cline et al. teach a method further comprising: generating a test report indicative of operability of the spa under test during the test regime (Claim 10: see col. 13, lines 20-32).

Cline et al. teach a method wherein the test report includes listing of test results for each controlled device, and reflects a pass or fail test state (Claim 11: see col. 13, lines 20-32).

Cline et al. teach a method wherein the spa system further includes a spa control panel for entering spa commands, the method further comprising: testing the spa control panel (Claim 14: see Figure 6: Control Panel 102).

Cline et al. teach a method for testing a spa system which includes a spa tub for holding water, an electronic controller system which controls the spa system functions, a plurality of controlled devices controlled by the controller system including a pump for recirculating water in the tub, and a heater for heating water, the method comprising: connecting a test station to the spa under test (Claim 15: see Figure 1); exercising the plurality of controlled devices during a testing regime (Claim 15: see col. 12, lines 43-62); providing power sensor signals to the test station indicative of a magnitude of

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electrical power drawn by the spa during the testing regime (Claim 15: see 13, lines 33-55); using the power sensor signals to generate a test report indicative of a response to the spa under test to the testing regime (Claim 15: see col. 14, lines 49-65).

Cline et al. teach a method wherein connecting the test station to the spa under test comprises: establishing an electrical signal connection between the electronic controller and the test station to allow commands to be passed from the test station to the electronic controller (Claim 16: see Figure 6).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. **Claims 12, 13, and 32-34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cline et al. in view of Abrams et al.

Cline et al. teach all of the features of the claimed invention, except a method further comprising: printing a certificate indicative of a successive test result if the spa under test operates normally during the testing regime. Abrams et al. teach printing a report (Claims 12 and 32: see col. 11, lines 48-65). It would have been obvious to the person having ordinary skill in the art at the time the invention was made to modify Cline et al. to print a report, as taught by Abrams et al., because this would provide a hard copy of the test results.

Cline et al. teach all of the features of the claimed invention, except a method further comprising: establishing a data communication link between the spa controller and the test computer system; periodically passing spa status data over the data communication link from the spa controller to the test computer system indicative of a status of the spa and the controlled devices; passing commands over the data communication link from the test computer system to the spa controller for execution by the spa controller. Abrams teach a data communication link (Claims 13 and 33: see Figure 1). It would have been obvious to the person having ordinary skill in the art at the time the invention was made to modify Cline et al. to use a communication link, as taught by Abrams et al., because this would allow for data to be transmitted to a remote processor.

Cline et al. teach all of the features of the claimed invention, except a system wherein said sensor signals are in analog form, and further comprising a data acquisition module connected to the current sensor to convert the sensor signals to digital form for processing by the test computer system. Abrams et al. teach a method

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of converting analog signals to digital signals (Claim 34: see Figure 17: A/D Converter 738). It would have been obvious to the person having ordinary skill in the art at the time the invention was made to modify Cline et al. to use an analog to digital converter, as taught by Abrams et al., because this would allow the analog signals to be formatted in a suitable manner for the controller to process.

Response to Arguments

6. Applicant's arguments filed December 29, 2005 have been fully considered but they are not persuasive. Applicant's argument that Cline does not teach exercising the plurality of controlled devices during a testing regime is not persuasive. The GFCI test occurs during programmed operation, which is equivalent to testing during a testing regime as claimed.

Applicant's arguments that Cline does not teach determining whether the electrical current drawn by the spa system during the testing regime is consistent with an expected current profile is not persuasive. The Examiner notes that the GFCI test has predetermined profiles for proper levels of current passing through the control circuits.

The Examiner notes that the spa system is equivalent to the test station.

The Examiner notes that the GFCI test monitors the levels of power passing through the circuit to determine if a fault has occurred as claimed.

The Examiner notes that Figure 6 shows a communication system as claimed.

The Examiner notes that the communication system transmits control commands to the various components of the spa system.

The Examiner notes that a fuse is designed to operate only with the proper current draw.

7. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Allowable Subject Matter

8. **Claims 37-44** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

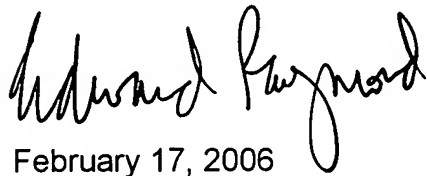
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Raymond whose telephone number is 571-272-2221. The examiner can normally be reached on Monday through alternating Friday between 8:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for

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the organization where this application or proceeding is assigned are 571-273-2221 for regular communications and 571-272-1562 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A handwritten signature in black ink, appearing to read "Edward Raymond". The signature is fluid and cursive, with the first name "Edward" and last name "Raymond" clearly distinguishable.

February 17, 2006
Edward Raymond
Patent Examiner
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